

Application No. 09/886,693
Amendment "A" dated September 16, 2004
Reply to Office Action mailed August 4, 2004

AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-18. (Cancelled)

19. (Original) In a video management system configured to receive a video stream containing one or more video pictures that are each divided into blocks, wherein the video management system is to provide a representation of the one or more video pictures to a subsample decoder for subsampling, a method of reducing the size of the one or more frames with minimal, if any, effect on the video quality generated from the one or more frames after subsampling, the method comprising the following:

accessing a video picture that is to be subsampled; and

for at least one block of the video picture, performing the following:

representing the block as a matrix;

pre-multiplying the block matrix by a pre-multiplication matrix, the pre-multiplication matrix generated from a first subsample matrix that represents the subsampled decoding in a first direction; and

post-multiplying the block matrix by a post-multiplication matrix generated from a second subsample matrix that represents the subsampled decoding in a second direction that is substantially perpendicular to the first direction.

20. (Original) The method in accordance with Claim 19, wherein the method further comprises the following:

providing the video picture with its one or more reduced size blocks to the subsample decoder.

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21. (Original) The method in accordance with Claim 19, wherein the method further comprises the following:

subsampled decoding the video picture.

22. (Original) The method in accordance with Claim 19, wherein the method further comprises the following:

displaying the subsampled decoded video picture on a display device.

23. (Cancelled).

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24. (Original) A video management system configured to receive a video stream containing one or more video pictures that are each divided into blocks, wherein the video management system is to provide a representation of the one or more video pictures to a subsample decoder for subsampling, the video management system comprising the following:

a memory configured to store one or more video pictures; and

a transcoder configured to perform the following:

accessing a video picture from the memory;

for at least one block of the video picture, performing the following:

representing the block as a matrix;

pre-multiplying the block matrix by a pre-multiplication matrix, the pre-multiplication matrix generated from a first subsample matrix that represents the subsampled decoding in a first direction; and

post-multiplying the block matrix by a post-multiplication matrix generated from a second subsample matrix that represents the subsampled decoding in a second direction that is substantially perpendicular to the first direction.

25. (Cancelled).

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26. (New) A computer program product comprising one or more computer-readable media having computer-executable instructions for implementing a method in a video management system configured to receive a video stream containing one or more video pictures that are each divided into blocks, wherein the video management system is to provide a representation of the one or more video pictures to a subsample decoder for subsampling, wherein the method for reducing the size of the one or more frames with minimal, if any, effect on the video quality generated from the one or more frames after subsampling comprises:

accessing a video picture that is to be subsampled; and

for at least one block of the video picture, performing the following:

representing the block as a matrix;

pre-multiplying the block matrix by a pre-multiplication matrix, the pre-multiplication matrix generated from a first subsample matrix that represents the subsampled decoding in a first direction; and

post-multiplying the block matrix by a post-multiplication matrix generated from a second subsample matrix that represents the subsampled decoding in a second direction that is substantially perpendicular to the first direction.

27. (New) A computer program product as recited in claim 26, wherein the method further comprises the following:

providing the video picture with its one or more reduced size blocks to the subsample decoder.

28. (New) A computer program product as recited in claim 26, wherein the method further comprises the following:

subsampled decoding the video picture.

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29. (New) A computer program product as recited in claim 26, wherein the method further comprises the following:

displaying the subsample decoded video picture on a display device.